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two or three layings of eggs, which are usually nearly hatched when they are laid. They are placed among dry leaves, or in shallow holes, and left to the action of the sun, which soon brings forth the young. The sea turtle buries hers in the sand, and leaves them to the same influence. The parents have no further care or trouble for their children.

In all reptiles, as in birds, the female has no special organ of connection, like the vagina in the higher animals. The male organ, when there is one, is introduced into the cloaca, or enlarged lower end of the large intestine, which is the common passage for the urine, the excrement, and the eggs; and which also serves to receive the male organ. When the male has no penis the semen is simply ejected into the cloaca, as in many birds. In this respect, therefore, birds and reptiles are alike. The bird is in fact, as before stated, only a modified reptile, the change having been effected by the process of evolution.

The ovaries are double in all reptiles, but single in birds. The end of the oviduct is expanded into a kind of bag, into which the egg passes from the ovary, and which by contraction forces it into the oviduct.

In lizards the male penis is double, like that of the snake, and they copulate belly to belly, according to observation. I have been told, by Southerners who have watched them, that alligators copulate belly to belly, in the water, which seems probable from the position of their organs.

In most of the higher reptiles there is a real internal copulation, but yet the male penis is never perfect, nor indeed is it in the ovipara generally. Instead of a urethral passage through the interior, as in the higher animals, there is simply a furrow, more or less deep, on the top, down which the semen flows, at the time of copulation. This shows incomplete development, for the same thing is observed in the human embryo, at an early period. This furrow forms first in the rudimentary penis, and gradually closes at the top to form the interior passage. Sometimes the development is stopped, from some cause or other, at the imperfect stage, and then the boy is born with a penis that has no internal passage, or an imperfect one.

In most turtles the penis has but a single point, but in many lizards, as in most serpents, it is double and provided with recurved spines for the purpose of better holding the female firmly during the copulation. The female turtles also have a real clitoris, or organ of excitement, which can be extended and drawn back, like the male penis. In birds also, when the male possesses a penis the female always has a clitoris, as in the higher vertebrae.

The penis in most insects is a cylindrical hollow tube, sometimes membranous, sometimes horny, and capable of being extended from the body. It is usually straight, and occasionally pointed, but sometimes much enlarged at the end, or curved, or double, and in the common wasp it is spoon-shaped. In some insects it is like a screw, in others covered with spines, and in beetles it is provided with a two-valved sheath, which opens the vulva of the female, to facilitate the introduction of the penis. More curious still, there are some insects in which the penis is placed on the female, who introduces it into the spermatic tube of the male, where it receives the semen and conveys it to the female ovæ. There is a real copulation, but it is the reverse way, the female really entering the male.

In the dragon-fly the male organ is placed forward, at the throat end of the abdomen, while the female organ is at the other end. During copulation, therefore, they have to assume a peculiar position, as may be often witnessed in the sum-

In some cases there is a remarkable disproportion in size between the two sexes, a greater even than is seen between the male and female ant. This is especially noticeable in the Sphærularia Bombi, a curious round worm, which lives as a parasite on certain kinds of bees. The female is about an inch long, blunt at both ends, and covered with small button-like projections. It has neither mouth, intestines, nor anus, and is in fact only a mass of fat jelly, containing a very large ovary, filled with eggs in various stages of development. It was once thought to be hermaphrodite, as no male was known, but lately the male has been discovered, -it is twentyeight thousand times smaller than the female, and is generally found sexually united with her, but is scarcely discernible.

In short, in the lower orders of beings, there is an endless variety in the form and disposition of the generative organs, and many of them are provided with curious accessory organs, whose uses have not yet been ascertained. In nearly all cases nature seems to have provided more perfectly for the reproduction of the species than for the preservation of individuals. Myriads of eggs are produced which are never developed, and myriads of young die, or serve for food for other beings. With a large number of animals, as in plants, reproduction is the last act; when that is fully consummated the parents die.

Whether the act is always a pleasurable one, as in the higher animals, we do not know, but it certainly is in some, and probably in all.

We will now describe the generative organs and their mode of action in man, the representative of the highest of the vivipara, the mammifers, from whom all the others may be considered only as deviations.

## CHAPTER XXII.

## ORGANS OF GENERATION IN VIVIPAROUS ANIMALS.

In all true viviparous animals, who bring forth their young alive, perfectly formed, the generative organs are more complicated, more perfect, and more differentiated for special purposes, than in the oviparous.

In the male, one of the first things to observe is the more complete separation of the sexual apparatus from all the others. Instead of one common passage or cloaca, into which the excrement, urine, and seminal fluid discharge, as in birds, there are two, one for the excrement alone (the rectum), and the other for the semen and urine (the urethra). The penis also always has an internal passage, instead of a mere external furrow; and is provided with a powerful expulsive apparatus, to throw the semen with force into the female organs. The urine and semen also are kept separate, though they both are finally expelled from the body through the same passage. In addition to the testicles we also find various other glands, the secretion of which is added to the semen, increasing its bulk, and probably modifying it in

In the female of the vivipara, in addition to the ovaries, there is provided an organ called the matrix, or womb, in which the impregnated egg is developed into the new being, and connected with this are various accessory organs, needed for the transmission of the semen and ovum, for receiving the male organ, and for connecting the new being with its parent. These will all be described in detail far-

Besides these there are also the mammæ, or breasts, to provide nutriment for the young after it is born, and it is from these, the distinctive organs of their kind, that the true vivipara derive their name of mammifera, or animals that suckle their

Among all the various classes of nursing animals, or mammifers, at the head of which stands man, we find the same kind of generative organs. They may vary in form, and in the way they act, but they are always essentially the same, both in male and female. If we describe them in man, therefore, they will be understood in all, because mere modifications can be readily pointed out and explained.

## HUMAN FEMALE ORGANS.

The external parts are not necessarily concerned in the process of generation, but still it is advisable to describe them, because certain modifications in their form and size may be of consequence, connected with marriage, and, also, because it is necessary, on various accounts, to refer to them.

The pubic bone, at the lower part of the abdomen, in front, is covered, in the female, by a thick layer of fatty matter, especially after the age of puberty, when it is also covered, more or less, with hair. This prominence is called the mons veneris, and its development gives a peculiar outline to this part of the female form. The covering of hair was formerly called the tressoria, and its absence was universally regarded as a reproach. In fact, it was customary to order it to be cut off, in open court, in ancient times, when a female was detected the third time in illicit intercourse, as we find stated by Chitty, in his Practical Treatise on Medical Jurisprudence. In some cases it is very slightly developed, or even altogether absent, and is never seen at all in those who have no ovaries, or in whom they are inactive. It is also liable to fall off after certain diseases, or after taking powerful drugs, and will even turn color after fright or severe agitation, the same as the hair on the head. In some individuals it becomes troublesome, from excessive development, and will occasionally extend itself far over the rest of the body. In some young persons, the

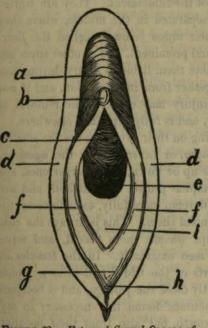


FIGURE 62.—External Sexual Organs of the Human Female before marriage.

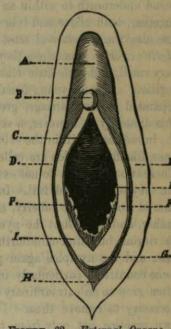


FIGURE 63.—External Organs of the Human Female after marriage.

Fig. 62.—a. The clitoris. b. The glans, or point of the clitoris. c. The meatus urinarius, or mouth of the urinary passage. dd. The labia majora, or large lips. e. The opening into the vagina. ff. The labia minora, or small lips. i. The membrane called the hymen, which partly closes the entrance to the vagina in unmarried females. g. The fossa naviculaire. h. The four-chatte.

Fig. 63,—The letters are the same as in Fig. 1, but it will be seen that the membrane called the hymen is broken, and the remains of it, between FF, are seen in fragments, like a fringe. The edges of the fringe finally shrink up into little points, called the carunculæ myrtiformæ, and

growth of the mons veneris and its tressoria is very rapid at the age of puberty, so that the appearance of the body is completely changed in that respect in a few weeks. It is customary for parents, and even some physicians, to regard the appearance of the tressoria as the certain and invariable sign of womanhood, and they are guided by its absence or presence in their treatment and communications. This sign, however, is not always to be relied upon, for I have known young persons, of not more than nine or ten years of age, upon whom it was very fully grown, and the mons largely developed, though they did not menstruate till several years after; and I have known others, at eighteen years of age, with scarcely an appearance of it, who had menstruated from the time they were fourteen. As a

sign of puberty, therefore, it cannot always be implicitly depended upon, though generally it may. I once saw an infant, of four years, on whom quite a large growth of the tressoria existed; and I have known females pass the turn of life who had

scarcely ever had any at all.

Immediately below the mons are two large lips, called the labia pudendi, the labia majora, or external lips, which are formed by a fold of the skin, made round and full by a thick deposit of fatty matter underneath. The outer surface of these lips is covered by the tressoria, but the inner surface is smooth, and studded with a number of little glands or follicles, which exude a peculiar fluid, with a characteristic odor. The external lips commence at the frontal or pubic bone, and they descend underneath to within an inch and a half of the fundament. They are united together, both above and below, but perfectly separated in the middle, where they are also the largest and most prominent. Their union below is called the fourchette or fork. Sometimes they are very large and prominent, and at other times are very small, and with little elasticity, which makes them liable to injury during parturition. In some young females they grow together from inflammation, and if not separated before marriage, great distress and injury may ensue. The removal of this disability is, however, a very simple matter, and is fully explained elsewhere.

Immediately within the external lips, and lying on their two sides, are the smaller ones, like folds, which are called the labia minora, or inner lips, or the nympha. These two inner lips do not extend so far, either up or down, as the larger ones, nor are they so round and full. In infants, the nymphæ project out farthest, and are seen in front, but at puberty, the external lips develop more fully, so as to close together, and thus shut the nymphæ in, and conceal them. This is always the case in virgins, but after childbirth the external lips become more flaccid, and separate, and the nymphæ again project, and are seen externally. In the females of some countries-particularly in the eastern parts of the Old World-the nymphæ often grow to an extraordinary size, so as to partly close the passage, and it becomes necessary to remove them. I have even sometimes found this necessary in my own practice, not only from their immense growth, but also from their peculiar condition. They are, in many persons, singularly sensitive, and appear to be the principal parts in which sexual excitement is felt, and when they are more than usually large, or irritable, that excitement becomes so great and overpowering that it cannot be controlled, but is really a species of furor, or madness, which irresistibly impels the individual to seek gratification in some form or other, regardless of consequences. The operation of removing them is comparatively simple, and unattended with the slightest danger.

In some of the Hottentot females, the nymphæ are singularly enlarged at that part where they join together above, the enlargement hanging down in front of the passage, like a veil. This is called the apron, and seems to be peculiar to certain tribes. It was formerly thought that this apron was a growth produced by artificial means, but it is now generally conceded to be natural. Several of these females have been examined at various times by medical men and travelers, and their accounts pretty much conform with each other. I had an opportunity myself, when in England, of seeing a Hottentot Venus, as she was called, who possessed this apron, and I was convinced that it was nothing more than an extension of the nymphæ. In these females, in fact, the whole of the external organs differ much from those of the white females; the mons veneris being less prominent, the external lips smaller, and the

passage itself much larger, while the mouth of the opening is more underneath, or farther back, so that, when stooping forward, it is nearly in the same position as in some animals. The length of this apron, in the case which I saw, was about three inches and a half, but they have been observed four or five inches long; and La Vaillant says, in his journey into the interior of Africa, even nine inches. Whether this singular apron serves any specific purpose, it is difficult to tell, but it certainly is a hindrance to connection, unless placed aside at the time, because it hangs down between the limbs, immediately in front. One of these females very much deceived the French physicians who examined her, by concealing the apron in a peculiar sit. uation, so that they could not see it, and some, in consequence, even doubted of its existence; but the deception was afterward discovered.

In many of the Oriental nations the enlargement of the nymphæ is so general that their excision is quite a common operation, like circumcision among the men. This is especially the case in Abyssinia and in the country of Ancient Judea. Many of the Mohammedans remove the nymphæ in most of their young girls, in order, as they say, to prevent deformity, but in reality to make them have less sexual feeling, so that they may not be disposed, when women, to desire more indulgence than may fall to their lot in common with many other wives. It is, therefore, the tyranny and jealously of polygamy that leads to this shameful mutilation. A medical friend of mine, who has resided some time in these countries, informed me that he had even known them to close the two lips together, in young female slaves, with a kind of lock, so that association was impossible until it was opened, and the manner of opening it was known only to their masters. In Sonnini's Travels in Upper and Lower Egypt much curious information can be found in regard to such customs. He tells us that, in many of the cities, there is a class of persons who make the removal of the nymphæ in young girls a trade, and that they go about the streets crying out, "Here's a good circumciser." And a more ancient traveller, Leo Africanus, informs us that they also call out, "Who is she that wishes to be cut?" The only instrument employed by these operators is a rude species of razor, and they astringe the wound by dusting it with ashes.

It is probable that this custom of female circumcision may not have originated altogether from jealousy, but partly from convenience, because when the nymphæ are large, the secretions of the parts are apt to accumulate under them, and cause great irritation, as is often the case in negresses, and occasionally even among whites. Sonnini also tells us that the lascivious Turks have another reason for removing the inner lips, and that is that the vulva, or mouth of the passage, may be perfectly smooth, and sexual congress more easy in consequence.

It is desirable that the condition of these parts, as well as of the external organs generally, should be known previous to marriage, for I have known many instances in which great distress and unhappiness has arisen from something unusual connected with them. They may be too large, or exceedingly sensitive, or grow together, or even be ulcerated, and though the trouble may be readily removed, yet its existence is not desirable at such a time.

At the upper junction of the two nymphæ they project over in a kind of round arch, immediately within which is a small firm body about the size of a large pea, which is called the clitoris. This organ is a most important and interesting one in many respects. It has several points of resemblance to the male penis, both in its structure and functions, being composed of a similar sponge-like substance, capable of being engorged or becoming erect, and is highly sensitive. It is, in fact, the principal seat of sensation in most persons, and the intensity of the sexual orgasm apparently depends upon the perfection of its nervous organization. When it is unduly developed or excitable, the sexual propensity often becomes irresistible, causing nymphomania or furor uterinus, and leading to moral delinquency, which arises more frequently from mere physical causes than is usually supposed. According to Chitty, if a female, in ancient times, was detected the fourth time in illicit intercourse, the clitoris was amputated in open court—a fact which shows that the law-makers of that period were aware of its influence.

In the early stages of fœtal existence it is difficult to discover the sex of the child, because the clitoris so much resembles the penis; and even at birth it is relatively much larger than in adult life. In some persons it attains an unusual size, so as to resemble the male organ very much, and can even be used in the same way with another female, though, of course, imperfectly. This fact I can state positively, for I have seen an instance in which the clitoris was fully as large as the penis is in most boys of nine or ten years of age, and capable also of becoming quite firm and erect. It is cases like these that are supposed to be of both sexes, as will be seen in the article on hermaphrodites. The clitoris, however, has naturally no passage down it leading from the bladder, the urethra being in its proper position; but in some few cases the passage has been found to exist, although the urine did not flow down it.

In some females this organ is so exquisitely sensitive, that it is scarcely possible for them to prevent its becoming excited, and creating sexual desires. Whenever the clothes touch it, or even when it comes in contact with the lips in walking, it becomes congested, and excites both the uterus and the brain. In these cases it is sheer nonsense to say that the strong sexual desire experienced arises merely from depravity, or that it can be overcome by moral efforts alone. We might just as reasonably conclude that the hunger of an empty stomach arises merely from unruly appetite, and that it also may be overcome by moral effort. In making these remarks, I, of course, do not intend to deny the great power of a determined will over the feelings, under most circumstances, nor to discourage such efforts; on the contrary they are most important, and often highly effective, but I wish to draw attention to the obvious fact that they alone cannot always succeed. It is unquestionable that in many females, and especially about the age of puberty, the excitability of the nymphæ and clitoris is so great that they cannot overcome or escape from the feelings and desires that this excitability creates; and, beyond doubt, it is from this cause alone that many seek improper indulgence, and become depraved. With these persons, therefore, it is not moral suasion alone, or threats, or the fear of consequences, that can be depended upon to effect a reformation, but the state of the body must also be ascertained, and the physical causes of the unnatural excitement removed. The timely advice of a judicious physician, would, in many of these cases, remove all occasion for moral exhortation or coercion, and effectually prevent any future evil, because licentiousness is fully as often a result of the bodily condition as it is of the mental disposition, or probably even more so. It should never be forgotten, when reasoning upon these subjects, that some persons cannot prevent sexual desire—though good moral training may enable them to struggle against it-while others can never experience it, even if they wish and desire to do so.

A proper attention to bathing and diet will usually overcome any undue excitability in these parts; and mothers especially of ght to know when this attention is required, both for their own peace and for the welfare of their children. Sometimes they are preternaturally sensitive before puberty, even at a very early age, leading to vicious habits and improper conduct, for which the young person is only blamed and reprimanded, while a want of proper information prevents a removal of the cause.

When the clitoris is too large, it can readily be amputated, more or less, as may be required, and its excitability reduced. This operation I have frequently performed with entire success, at various ages. On the other hand, when it is too small, and not sufficiently sensitive, means may be taken to make it enlarge, and to increase its excitability. This may be advisable in cases of barrenness, and when the temperament is too cold.

The clitoris is present in most mammiferous animals, even in the whale, and in the imperfect kangaroo. In the rat, the rabbit, the ape, and most carnivorous animals, it is especially developed, and frequently contains a small bone, like the penis, as we see in the bear, and the otter. In the *spider monkey* the clitoris is very much like a penis, being three or four inches long, provided with a perfect glans and prepuce, and also with a urethra, like a groove, down which the urine flows from the bladder. In the kangaroo and opossum, the clitoris is split, like the glans in the male, and in the *lemming* and some few others, it even has an interior passage, or urethra, which makes it almost identical with the penis.

We read in the Grecian classics that the females of Lesbos were famed for an unusual development of the clitoris.

Cowper's glands are sometimes found in the lower animals, and in some of them the preputial glands are often much developed, which is the reason they emit such a powerful odor. Cowper's glands have also been seen in the human female, though they were formerly thought to belong only to the male organs.

There are never any nymphæ, or inner lips, in the lower animals, nor mons veneris, not even in the monkey, and the external lips are also small and thin, and without a tressoria, while the mouth of the vagina is round, instead of oval, as in the human being. In the mare, and some few others, there is a small tube on each side of the vagina, called the vaginal canal, leading to the broad ligaments of the womb, the use of which is unknown.

These parts, namely, the mons veneris, the two external lips, and the two inner lips, or nymphæ, constitute the external genitals in all females, but their form and situation occasionally varies in different individuals and races, as already shows.

The opening between the lips, or the external mouth, is called the vulva or fossa magna, and it is also liable to vary much in different persons. As a general rule, the vulva or external opening, is higher up, or more in front in white females than t is in the colored races, and the vagina is shorter and smaller, while the external ips are more rounded and firmer. There is also a less abundant tressoria in the white female, and the clitoris is not so large on the average. These differences I have taken great trouble myself to ascertain, especially during a recent visit to the South, and I consider them of considerable importance. The form of the external lips alters considerably after pregnancy, and even to some extent after association only. The color of the interior surface also changes from the same causes, being a perfect pink in virgins, but becoming slightly tinged with violet or brown im-

mediately after marriage. The lips also become less firm and hang lower, and separate further. These alterations are often quite sufficient, with a practiced person, to decide whether association has been practiced or not. It is, perhaps, necessary to remark, however, that other practices, besides actual coition, may cause similar changes.

On separating the external lips and the nymphæ, there will be seen, at the lower part of the opening, by the fourchette, the entrance to the vagina, which is nearly oval, and in virgins is usually more or less closed by a membrane or skin which grows over it. This is called the hymen, and it is popularly, but erroneously supposed to be always present during maidenhood. The space below, between the lowest point of the vulva, or the fourchette, and the anus, is called the perineum, and the space between the upper part of the mouth of the vagina and the clitoris is called the vestibulum, in the middle of which is situated the meatus urinarius, or mouth of the passage by which the urine flows from the bladder. This passage from the bladder, scientifically called the urethra, is supposed by many uninformed persons, to be the same as the vagina, or passage from the womb, but it will be seen that they are perfectly distinct, although, in some cases of doubtful sex, the urethra has been found so large as to be mistaken for the vagina, and during violent deliveries they are often torn into one.

The hymen has probably given rise to more misapprehension than any other of the external parts, and there are more popular fallacies and prejudices connected with it. In most young virgins the external opening of the vagina is always more or less closed by a membrane of this kind, which has to be broken in the first sexual congress, but in many it never exists at all, not even in childhood. The idea that a young female is certainly not a virgin if the hymen be absent, is, therefore, erroneous, though it usually does exist. Besides being naturally absent, it is also liable to be destroyed in many ways. Thus in some it is broken by the first rush of the menses, and in others it may be ruptured by various accidents, such as falls or extreme separation of the limbs. I have even known it to be ruptured, and flooding brought on, by the action of powerful cathartic medicines, which, it is well known, may even cause miscarriage during pregnancy. A long continuance of certain debilitating diseases will also relax the parts so much that no resistance whatever is made by the nymen, even if it remain, which is the reason why those who marry late have seldom any trace of it, because if they escape all the various accidents referred to, they seldom escape sickness and debility. It should be borne in mind that the membrane is often very thin, and that it may be broken while using the bath or the napkin, as I believe is often the case with children in the hands of their nurses, and with young persons during their periods, especially if they use those articles too large or too firmly bound against the person. Sometimes, also, the hymen is destroyed by young persons themselves in various thoughtless or improper practices, and sometimes it is destroyed during certain necessary operations and examinations by the medical man. The old Jewish custom, therefore, as stated in the Bible, of examining the bridal sheets for the blood stains as proofs of virginity, was absurd and unjust. When the hymen is perfect, it is true, there is usually more or less blood lost when it is first broken, but not always even then, as I have witnessed during examinations, and sometimes blood will flow from the vagina at such times when there is a physical disproportion between the parties, though the hymen may not exist. In some females these parts are naturally small, and disposed to contract when left to themselves, so that even widows, in a second marriage, will exhibit all the usual indications of virginity. There are even means of forming a hymen artificially, and this has been done so perfectly in some cases, that it has been thought the female had never had association, when she, in reality, had even been a mother! In short, though there is usually more or less pain and difficulty attending the first act of coition, yet there are many exceptions, from various causes; and it is seldom that much of either is experienced if the first act is delayed till after the twentieth year.

In nearly every case the hymen has an opening through it at the lower part, by which the menses escape, but occasionally it is without such an opening, or imperforate, and the menses being, of necessity, retained, the health suffers very much. In such cases constant suffering, insanity, or even death, is not an unfrequent result if relief is not speedily obtained. All that is required in such obstructions is to puncture the hymen, an operation neither difficult nor dangerous in proper hands, It is more to our present purpose to remark, that the hymen is occasionally not only imperforate, but also unusually strong, so that it is difficult or even impossible for the husband to break it. I have had such cases come under my notice in which the marriage could not be consummated, and neither party knowing the real cause of the difficulty, their distress was extreme. The treatment of this peculiar trouble is obvious; the surgeon's knife must first open the callous hymen, and then, if further treatment is needed, the opening must be dilated with appropriate instruments. I have known this membrane to be as hard as if it were ossified, or bony, and so unyielding that it had to be removed almost totally before association could be practiced. After the destruction of the hymen, its fragments usually remain round the external mouth in the form of little protuberances, like pimples, which are sometimes highly sensitive; they are called the carunculæ myrtiformæ. Not long since a young man killed himself on his wedding night, because he did not find the proofs of his wife's virginity, which he had been led to expect from the Bible, and he believed her unchaste. The event made a great sensation, but the real cause was unknown except

From what has been already stated it will be obvious that actual proof of violation or unchastity may be very difficult to obtain in many cases. In fact, positive proof is often impossible, and for want of it many a female has been unable to obtain justice for wrong done to her, while many a man has been improperly condemned.

As stated in previous articles, many undoubted virgins would, on examination, be pronounced unchaste, while many really unchaste females would be pronounced virgins. There are, it is true, exceptional cases, but the fact that such do occur makes the matter one of great uncertainty. The truth is, there are no positive means of proving in all cases from the appearance of the female organs, neither virginity, habitual association, nor even violation.

There is, however, one way in which connection can be proved, or even the attempt at it, if recent; providing emission has taken place on the part of the male.

If there has been any discharge of semen, either within the female organs or without, it can be infallibly detected, even though much mixed with other fluids. Its presence may be suspected from its appearance and edor, but the only positive proof is the presence of the animalcules as shown by the microscope. If there be any semen present they can be found, and if they are absent it is a proof there is no semen, and consequently there has been no emission.

In all cases of alleged violation, therefore, the semen must be sought for, both in the female parts, on her person, and on her clothing. A considerable time may have elapsed since the emission, and the semen may be mixed with blood, or mucus, or may be fully dried, but still the animalcules can be detected. Their shape and general appearance is so peculiar that they can never be mistaken for any other beings, and any one accustomed to observe them can always speak positively as to their presence or absence.

There have been many trials, for alleged violation, in which this evidence has been most important. In fact, the conviction or acquittal of the accused may often depend upon it, as will be seen by referring to any good work on medical jurisprudence.

Viery tells us in his Histoire Naturelle du Genre Humain, that certain savage people fasten the lips of the vulva together, in young girls, with a ring, so that connection with them is impossible without its being known. In Darfour they even sew the lips together, leaving only a little opening through which the courses can flow. At the time of marriage the husband opens the passage with his knife.

On the contrary, certain tribes in Asia and Africa have the virgins deflowered by their slaves, and no man will marry a girl while she remains a virgin. Strabo tells us that it was much the same with the ancient Armenians, among whom the virgins always went to one of the temples to be deflowered, because they could not get husbands while they remained virgins. It has also been stated that the ancient Phoenicians habitually made their slaves deflower the virgins.

This shows how ideas and manners vary among different people; what is valued by one is despised by another.

As before stated, virginity may be reproduced (that is apparently) artificially, so as almost to defy detection, after it has been lost. And this has been done in many unsuspected cases.

It is a remarkable fact that the hymen may be so elastic, and the lips and vulva have such contractile power in some females, that they can have connection for a long time, and yet preserve all the appearance of virginity. Parent Duchatelet tells us, in his great work on Prostitution, that two girls, who had been accused of being prostitutes, demanded an examination, affirming they were virgins. An experienced surgeon who examined them stated that he could not be sure about one of them, but that he thought the other might have had connection, though he could not be positive. It was afterward found that they had both long been prostitutes, and had even had the venereal disease. Jacquemin also tells us he has known girls who had been on the town ten or twelve years who could easily pass for virgins. And Parent Duchatelet tells us further that he saw a woman fifty-one years of age, who had been a prostitute since she was fifteen, in whom all the organs might easily be mistaken for those of a young maiden.

Most of the signs of virginity may, therefore, be very obscure.

## PROOFS OF VIOLATION.

From what has been stated in the previous article it is evident that a female may be violated, even though she be a virgin, and yet it may be difficult to prove the fact. Usually the violation is evident, but in some cases it is not shown at all by the appearance of the female organs, and this fact should be borne in mind.

In all cases of alleged violation the only sure proof, as before stated, is the presence of the semen, and this should always be sought for. If there has been any emission it may always be found and recognized. When fresh its odor will betray it, and by the aid of the microscope its presence may be proved, even when mixed with blood, mucus, or other fluids. The seminal animalcules can invariably be detected, even in semen that has been dried for months or years, and on wetting dried semen it will always give out its peculiar odor. It has also peculiar chemical reactions, and if any dry spots of it upon linen be held near the fire they become of a peculiar yel lowish fawn color, and a number of white dots make their appearance which we not seen before. This peculiarity alone is sufficient to distinguish it from any other secretion. In all cases where there has been emission, therefore, the presence of the semen can be proved, as it will be found either in the female organs, mixed with mucus or blood, or in spots like gum on the clothes. These spots placed close to the fire will show as above, and if wet will give out the seminal odor.

Such facts have often been brought forward in trials for rape, and the conviction of the violator has depended upon them.

In former times some anatomists, Haller among others, advanced the theory that the hymen was peculiar to the human female, and made so for moral reasons. They thought it was intended to prove chastity in virgins or the reverse, a notion, as we have shown, altogether without foundation. A precisely analogous part is found in many animals, as Duvernoy has demonstrated, and for many reasons it is often totally absent even in young children. If any of these external parts are really peculiar to the human being, it is rather the nymphæ, of which scarcely a sign is found in any other animal. If, therefore, the hymen has any special use, it is certainly not that of proving virginity. And, further, as before remarked, it both can be, and sometimes is, imitated artificially by the surgeon, in the most perfect manner. We read in Deuteronomy that, among the ancient Jews, if a virgin could not show, when married, the blood on the sheets, she was to be stoned to death, and no doubt this piece of ignorant brutality has often been perpetrated.

The ovaries have already been fully described, and also the ovum; it will, therefore, be only necessary to show their position in the body, and their connection with the other parts. The remaining organs will be described in detail.

Below, the internal organs are all shown cut open.

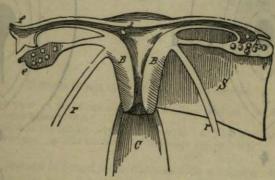


FIGURE 64

ments. ce. The ovaries, showing the ova. f. The right Fallopian tube. In the left tube an at l.